

**TABLE M.5.6.1.2–4.—National Ignition Facility Accident Frequency and Consequence  
(Unfavorable Meteorology)**

Accident	MEI			Offsite Population <sup>a</sup>		Individual Noninvolved Worker		Noninvolved Worker Population	
	Frequency (per year)	Dose (rem)	LCFs <sup>b</sup>	Dose (person-rem)	LCFs <sup>c</sup>	Dose (rem)	LCFs <sup>b</sup>	Dose (person-rem)	LCFs <sup>c</sup>
Earthquake during No Action Alternative operations	$2.00 \times 10^{-8}$	$6.15 \times 10^{-3}$	$3.69 \times 10^{-6}$	3.05	$1.83 \times 10^{-3}$	$1.33 \times 10^{-2}$	$8.01 \times 10^{-6}$	2.22	$1.33 \times 10^{-3}$
Earthquake during depleted uranium shot	$2.00 \times 10^{-9}$	$1.10 \times 10^{-2}$	$6.57 \times 10^{-6}$	4.51	$2.71 \times 10^{-3}$	$2.25 \times 10^{-2}$	$1.35 \times 10^{-5}$	3.74	$2.24 \times 10^{-3}$
Earthquake during highly enriched uranium shot	$2.00 \times 10^{-9}$	$1.14 \times 10^{-2}$	$6.84 \times 10^{-6}$	4.67	$2.80 \times 10^{-3}$	$2.33 \times 10^{-2}$	$1.40 \times 10^{-5}$	3.83	$2.30 \times 10^{-3}$
Earthquake during thorium shot	$2.00 \times 10^{-9}$	$1.14 \times 10^{-2}$	$6.86 \times 10^{-6}$	4.76	$2.86 \times 10^{-3}$	$2.31 \times 10^{-2}$	$1.39 \times 10^{-5}$	4.10	$2.46 \times 10^{-3}$
Earthquake during tracer shot	$2.00 \times 10^{-9}$	$7.02 \times 10^{-3}$	$4.21 \times 10^{-6}$	3.26	$1.95 \times 10^{-3}$	$1.52 \times 10^{-2}$	$9.14 \times 10^{-6}$	2.44	$1.46 \times 10^{-3}$
Earthquake during plutonium without yield shot	$2.00 \times 10^{-9}$	$2.16 \times 10^{-2}$	$1.30 \times 10^{-5}$	8.33	$5.00 \times 10^{-3}$	$4.69 \times 10^{-2}$	$2.82 \times 10^{-5}$	8.23	$4.94 \times 10^{-3}$
Earthquake during plutonium with yield shot	$2.00 \times 10^{-9}$	$1.16 \times 10^{-2}$	$6.96 \times 10^{-6}$	4.98	$2.99 \times 10^{-3}$	$2.50 \times 10^{-2}$	$1.50 \times 10^{-5}$	4.27	$2.56 \times 10^{-3}$

Source: LLNL 2003d.

<sup>a</sup>Based on the population of approximately 6,900,000 persons residing within 50 miles of LLNL.<sup>b</sup>Increased likelihood of a latent cancer fatality.<sup>c</sup>Increased number of latent cancer fatalities.

LCFs = latent cancer fatalities; MEI = maximally exposed individual.